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State of New Hampshire
Department of Resources and Economic Development
DIVISION OF FORESTS AND LANDS

105 Loudon Road, Prescott Park, P.O. Box 856, Concord, N.H. 03301
John E. Sargent, Director Tel. (603) 271-2214

December 2, 1988

Imants Millers, Acting Field Representative
United States Department of Agriculture
Forest Service, Northeastern Area
State and Private Forestry, Forest Pest Management
P. O. Box 640, Durham, New Hampshire, 03824

Dear Ims:

Here are New Hampshire's Forest Insect and Disease Conditions Report for 1988.

Sincerely yours,

Alfred C. Avery
Forest Entomologist

1988 PEST CONDITIONS REPORT WORK SHEET

PEST - (COMMON NAME): Gypsy Moth

(SPECIFIC NAME): Lymantria dispar (Linnaeus)

HOST: Various hardwoods with strong preference for the oaks.

PRESENT CONDITION: A 9/14 aerial refoliation* survey detected an increase in the 1987 defoliated area plus two (2) new infestations in other areas of the State.

AREA - TOTAL ACRES:
All three defoliated areas totaled 1,070 acres, an increase of 690 acres over 1987's total.

LOCATION:
Auburn-Londonderry-Manchester, Ashland-Holderness, and Bradford townships.

SEVERITY - INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES:
All three areas were considered moderately to heavily defoliated.

LOSSES - INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES:
None.

TREND - CHANGES IN INCIDENCE AND SEVERITY OVER THE PAST FEW YEARS AND EXPECTATIONS FOR NEXT YEAR: Except in the Auburn-Londonderry-Manchester infestation, which is going into its 4th year, egg mass counts show expansion and possible increase in intensity. Pheromone traps sites showed large increases in 3 more additional areas,.

CONTROL PROJECTS - METHOD, MATERIAL, ACRES, COST, RESULTS:

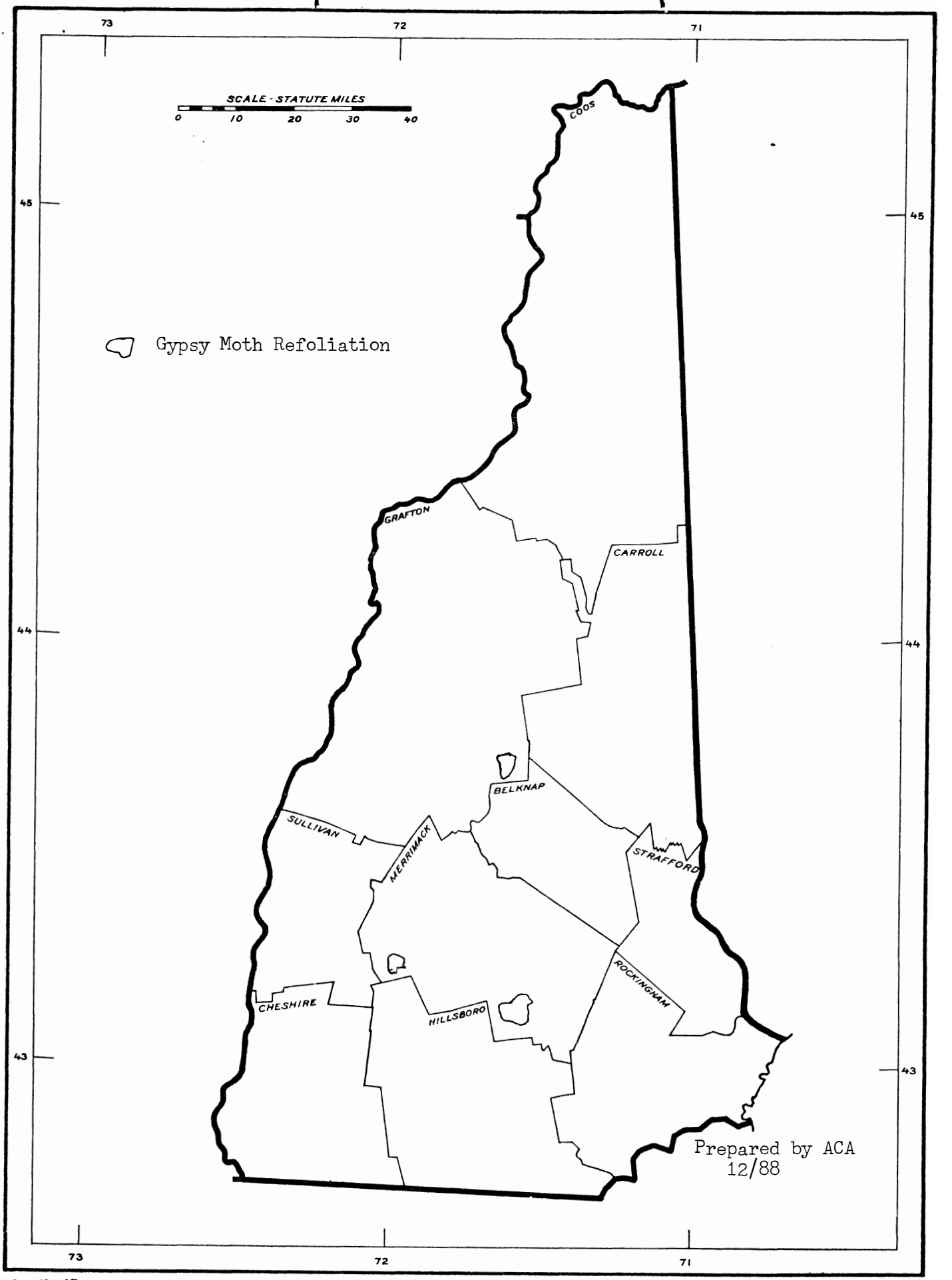
None.

ADDITIONAL COMMENTS:

* Due to poor flying weather (primarily heavy haze) the GM aerial defoliation survey wasn't flown until 9/14. Color tones of oak foliage was visible as refoliation of moderate to heavy defoliation. At that late date light defoliation would not be visible from above.

Pheromone trap site egg mass counts (based on the 5-minute walk) showed large increases in count this year when compared to 1987 and 1986 counts in Hillsboro-Henniker, North Conway-Madison-Freedom, and Holderness areas.

NEW HAMPSHIRE



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1988 PEST CONDITIONS REPORT WORK SHEET

PEST - (COMMON NAME): Spruce Budworm

(SPECIFIC NAME): Choristoneura fumiferana (Clemens)

HOST: Balsam Fir

PRESENT CONDITION: No budworm evidence was seen nor reported during 1988.

AREA - TOTAL ACRES: 300,000 were surveyed this year with pheromone baited Multi-pher traps - No SBW moths were caught.

LOCATION: Northern Coos County.

SEVERITY - INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES:

None.

LOSSES - INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES:

Salvage cuts and stand cleanup continuing. Some aerial herbicide releases conducted to remove hardwood overstory in natural reproduction areas.

TREND - CHANGES IN INCIDENCE AND SEVERITY OVER THE PAST FEW YEARS AND EXPECTATIONS FOR NEXT YEAR:

Some planting of clear-cut areas with spruce has been done.

CONTROL PROJECTS - METHOD, MATERIAL, ACRES, COST, RESULTS:

None.

ADDITIONAL COMMENTS:

Some additional acreage of hardwood overstory release of balsam fir natural reproduction is planned for 1989.

No evidence nor reports of defoliation have been recorded for the last five (5) years.

1988 PEST CONDITIONS REPORT WORK SHEET

PEST - (COMMON NAME): Oak Leaftier

(SPECIFIC NAME): Croesia semipurpurana (Kearfott)

HOST: Red Oak.

PRESENT CONDITION: Flucuating. Pheromone trap monitoring in 1987 resulted in an average of 14 moths per trap, 1988 moth catch averaged 244 moths per trap. An aerial defoliation survey revealed no defoliation in N. H.

AREA - TOTAL ACRES: 16,160 acres.

LOCATION: Infestation lies along Cheshire County, NH and Franklin County, MA common border in southwestern N.H.

SEVERITY - INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES:

No defoliation was observed on the NH side of the border, however heavy to severe defoliation was noted immediately south of the border in Massachusetts.

LOSSES - INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES:

None from the current infestation.

TREND - CHANGES IN INCIDENCE AND SEVERITY OVER THE PAST FEW YEARS AND EXPECTATIONS FOR NEXT YEAR:

Expect an increase in population levels in NH in 1989 because of; 1) over a 1700% increase in trap catches and 2) northward movement in the MA infestation

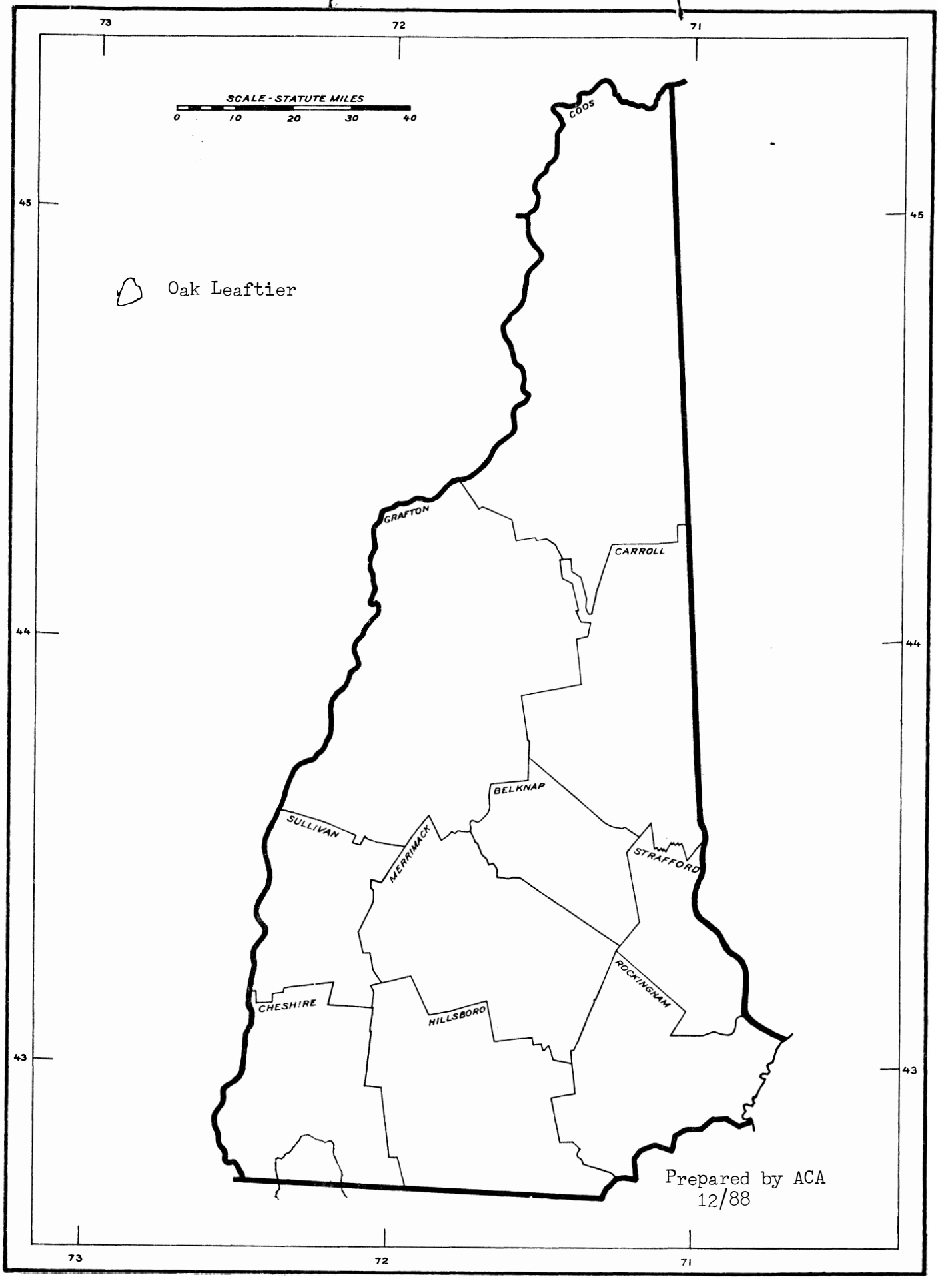
CONTROL PROJECTS - METHOD, MATERIAL, ACRES, COST, RESULTS:

None.

ADDITIONAL COMMENTS:

Plan to continue pheromone trap monitoring, aerial defoliation survey and expect to conduct an egg survey this fall or early winter.

NEW HAMPSHIRE



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1988 PEST CONDITIONS REPORT WORK SHEET

PEST - (COMMON NAME): Pear Thrips

(SPECIFIC NAME): prob. Taeniothrips inconsequens (Uzel)

HOST: Hardwoods, preference to sugar maple.

PRESENT CONDITION: common in southwestern and western parts of the State on sugar maple, spotty throughout the rest of the State.

AREA - TOTAL ACRES:

LOCATION: none delineated due to other abundance of aphids and scale in the same areas. varying population levels across the State, concentrated in SW & W.

SEVERITY - INCLUDE ACRES OF MODERATE AND HEAVY DEFOLIATION OR INFECTION; DEFINE CLASSES:

Little refoliation recognized but abundant ragged and tatered tree crowns.

LOSSES - INCLUDE AREAS OF TREE MORTALITY; ALSO VOLUME AND/OR $ ESTIMATES:

None available as yet.

TREND - CHANGES IN INCIDENCE AND SEVERITY OVER THE PAST FEW YEARS AND EXPECTATIONS FOR NEXT YEAR:

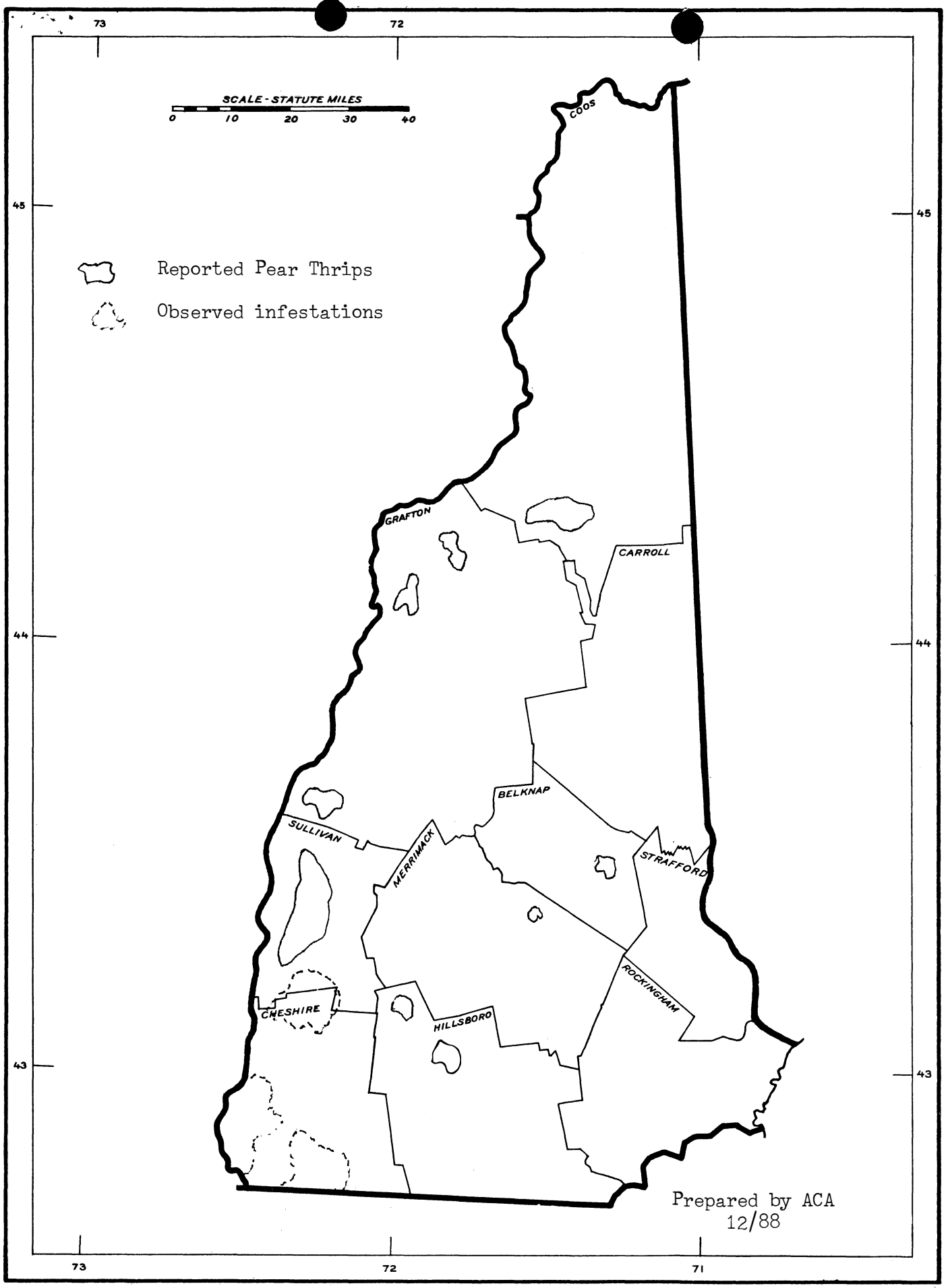
Not obvious or not recognized during the last 2 years, neither was any wide-spread frost damage.

CONTROL PROJECTS - METHOD, MATERIAL, ACRES, COST, RESULTS:

Five (5) landowners with a total of 500 acres are preparing to treat aerlly with Sevin with State assistance.

ADDITIONAL COMMENTS:

NEW HAMPSHIRE



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